Docket No. 1454,1012

Ser. No. 09/784,352

## AMENDMENTS TO THE CLAIMS:

All pending claims are set forth below. Cancelled and withdrawn claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with strikethrough. The status of each claim is indicated with one of (original), (currently amended), (previously amended), (cancelled), (withdrawn), (new), (previously added), (reinstated - formerly claim #), (previously reinstated), (re-presented - formerly dependent claim #), or previously re-presented). Please AMEND claims 1, 5, 12, 34,36, 38, 39, and 40 and CANCEL claim 3 without prejudice or disclaimer in accordance with the following:

1. (currently amended) Method for querying a database with database contents with a database structure comprising:

placing a query in a query structure that differs from the database structure wherein the query structure and the database structure reference a standard structure via with a reference logic and wherein the reference logic is at least one of:

transmitted together with the query;

at least partially transmitted together with the query; and

present in the database; and

is at least partially present in the database,

wherein the reference logic provides a link between the query structure and the database structure via the standard structure.

wherein the standard structure is described by standard descriptors, and the query structure and the database structure are described by at least one of the standard descriptors and more special descriptors, wherein the more special descriptors reference the standard descriptors with the reference logic.

- 2. (original) Method as claimed in Claim 1, wherein the reference logic is stored in the database.
  - 3. (cancelled)
- 4. (previously presented) Method as claimed in Claim 1, wherein standard descriptors present in the query structure are compared with the standard descriptors of the database, wherein identical standard descriptors are evaluated for the query.

Docket No. 1454.1012

Ser. No. 09/784,352

5. (currently amended) Method as claimed in Claim 31, wherein the special descriptors present in the query structure are compared with the special descriptors of the database, wherein identical special descriptors are evaluated for the query.

- 6. (previously presented) Method as claimed in Claim 1, wherein dissimilar special descriptors are reviewed to determine whether a computation logic is present in the database, so that a respective special descriptor of the database structure can be computed directly from the corresponding special descriptor of the query structure by means of the computation logic.
- 7. (original) Method as claimed in Claim 6, wherein the computation logic is stored in the database.
- 8. (previously presented) Method as claimed in Claim 7, wherein, for dissimilar special descriptors for which no computation logic is present, a review is made to determine whether a reference logic to standard descriptors is at least partially present in the database.
- 9. (previously presented) Method as claimed in Claim 7, wherein, for dissimilar special descriptors for which no computation logic and/or no reference logic is present, a review is made to determine whether the reference logic was transmitted together with the query.
- 10. (previously presented) Method as claimed in Claim 7, wherein atomic elements defining the information and/or link of a special descriptor are used as the computation logic.
- 11. (original) Method as claimed in Claim 10, wherein the atomic elements used are semantic, physical and linking atomic elements to define the semantic meaning, the physical memory structure, and the link between memory structure and semantics.
- 12. (currently amended) Computer readable media embodying a database structure to execute a method comprising:

placing a query in a query structure that differs from the database structure wherein the query structure and the database structure reference a standard structure via with a reference logic and wherein the reference logic is at least one of:

transmitted together with the query;

Docket No. 1454.1012

Ser. No. 09/784,352

at least partially transmitted together with the query; and present in the database; and

is at least partially present in the database,

wherein the reference logic provides a link between the query structure and the database structure via the standard structure.

wherein the standard structure is described by standard descriptors, and the query structure and the database structure are described by at least one of the standard descriptors and more special descriptors, wherein the more special descriptors reference the standard descriptors with the reference logic.

- 13. (original) Computer readable media as claimed in Claim 12, wherein the reference logic is stored in the database.
  - 14. (cancelled)
- 15. (previously presented) Computer readable media as claimed in Claim 12, wherein standard descriptors present in the query structure are compared with the standard descriptors of the database, wherein identical standard descriptors are evaluated for the query.
- 16. (previously presented) Computer readable media as claimed in Claim 14, wherein the special descriptors present in the query structure are compared with the special descriptors of the database, wherein identical special descriptors are evaluated for the query.
- 17. (previously presented) Computer readable media as claimed in Claim 12, wherein dissimilar special descriptors are reviewed to determine whether a computation logic is present in the database, so that a respective special descriptor of the database structure can be computed directly from the corresponding special descriptor of the query structure by means of the computation logic.
- 18. (original) Computer readable media as claimed in Claim 17, wherein the computation logic is stored in the database.
  - 19. (previously presented) Computer readable media as claimed in Claim 18, wherein,

Ser. No. 09/784,352

Docket No. 1454.1012

for dissimilar special descriptors for which no computation logic is present, a review is made to determine whether a reference logic to standard descriptors is at least partially present in the database.

- 20. (previously presented) Computer readable media as claimed in Claim 18, wherein, for dissimilar special descriptors for which no computation logic and/or no reference logic is present, a review is made to determine whether the reference logic was transmitted together with the query.
- 21. (previously presented) Computer readable media as claimed in Claim 18, wherein atomic elements defining the information and/or link of a special descriptor are used as the computation logic.
- 22. (original) Computer readable media as claimed in Claim 21, wherein the atomic elements used are semantic, physical and linking atomic elements to define the semantic meaning, the physical memory structure, and the link between memory structure and semantics.

23.	Cancelled.			
24.	Cancelled.			y
25.	Cancelled.			
26.	Cancelled.			
27.	Cancelled.			
28.	Cancelled.			
29.	Cancelled.			
30.	Cancelled.		·	
31.	Cancelled.			

- 32. Cancelled.
- 33. Cancelled.
- 34. (currently amended) A method of querying a plurality of databases, comprising: submitting a query in an original query structure to a plurality of databases; and separately revising the original query structure at each of the databases, to produce query structures searchable within the respective databases,

wherein the original query structure is revised in a decentralized fashion, without middleware,

wherein a standard structure is described by standard descriptors, and the query structure and a database structure are described by <u>at least one of</u> the standard descriptors and/or more special descriptors, wherein the more special descriptors reference the standard descriptors <del>via</del> with a reference logic, and

wherein the special descriptors present in the query structure are compared with the special descriptors of the database, wherein identical special descriptors are evaluated for the query so that the reference logic provides a link between the original query structure and the database structure via the standard structure.

- 35. (cancelled)
- 36. (currently amended) A method of querying a plurality of databases, comprising: submitting a query to a plurality of databases, the query containing information fields not contained in all of the databases; and

separately searching for the query at the plurality of databases, each database using a reference logic at the database to infer a relationship between fields in the database and fields in the query not contained in the database,

wherein each database infers the relationship in a decentralized fashion, without middleware.

wherein a standard structure is described by standard descriptors, and a query structure and a database structure are described by at least one of the standard descriptors and/or more special descriptors, wherein the more special descriptors reference the standard descriptors via with the reference logic, and

Docket No. 1454.1012

Ser. No. 09/784,352

wherein the special descriptors present in the query structure are compared with the special descriptors of the database, wherein identical special descriptors are evaluated for the query-so that the reference logic provides a link between the query structure and the database structure via the standard structure.

## 37. (cancelled)

38. (currently amended) A method of querying a plurality of databases, comprising: submitting a query in an original query structure to a plurality of databases; and separately revising the original query structure at each of the databases, independently of middleware, to produce query structures searchable within the respective databases,

wherein a standard structure is described by standard descriptors, and the query structure and a database structure are described by at least one of the standard descriptors and/or more special descriptors, wherein the more special descriptors reference the standard descriptors via with a reference logic, and

wherein the special descriptors present in the query structure are compared with the special descriptors of the database, wherein identical special descriptors are evaluated for the query-so that the reference logic provides a link between the query structure and the database structure via the standard structure.

39. (currently amended) Method for querying a database with database contents with a database structure comprising:

placing a query in a query structure that differs from the database structure wherein the query structure and the database structure reference a standard structure via-with a reference logic and wherein the reference logic is at least one of:

transmitted together with the query;

at least-partially transmitted together with the query; and

present in the database; and

is at least partially present in the database,

wherein the reference logic provides a link between the query structure and the database structure via a standard structure, and

wherein the standard structure is described by standard descriptors, and the query structure and the database structure are described by at least one of the standard descriptors and/or more special descriptors, wherein the more special descriptors reference the standard descriptors via

Ser. No. 09/784,352

with the reference logic.

40. (currently amended) Computer readable media embodying a database structure to execute a method comprising:

placing a query in a query structure that differs from the database structure wherein the query structure and the database structure reference a standard structure via-with a reference logic and wherein the reference logic is at least one of:

transmitted together with the query;

at least-partially transmitted together with the query; and

present in the database; and

is at least-partially present in the database,

wherein the reference logic provides a link between the query structure and the database structure via a standard structure, and

wherein the standard structure is described by standard descriptors, and the query structure and the database structure are described by at least one of the standard descriptors and/or more special descriptors, wherein the more special descriptors reference the standard descriptors via with the reference logic.